



Walsall County Borough

SANITARY AUTHORITY.

ANNUAL + REPORT,

OF THE

MEDICAL OFFICER OF HEALTH,

J. SCOTT WILSON,

M.D., D.P.H., CAMB.,

FOR THE YEAR 1898.

WALSALL :

J. AND W. GRIFFIN, "OBSERVER" OFFICE, THE BRIDGE.

—
1899.

*To the Chairman and Members of the Health Committee of
the County Borough of Walsall.*

GENTLEMEN,

I have the hononr to present to you my Tenth Annual Report concerning the Vital Statistics, the Sanitary Condition, and the Health of your Borough, and which also includes an appendix shewing the work done by the Sanitary Inspectors.

The year 1898, in regard to disease and death, shews a marked improvement when compared with 1897. The annual death rate of 18·55 per thousand, against 20·82 of the preceding year, is a considerable fall and quite below the mean average rate for Walsall. The fall in the rate of mortality might be reasonably attributed to the decrease in the zymotic death rate, which in 1897 was 3·77 per thousand, and this year only 2·44. But for the heavy mortality from Diarrhœa during the months of August and September, when the weather was exceptionally hot, our zymotic death rate would have been very low indeed.

The Scarlet Fever epidemic of 1897 was continued during the whole of this year, principally in the Palfrey district. The cases would not be considered to be of a very severe type, as only 13 deaths were registered. There is still great difficulty experienced in isolating Scarlet Fever cases in small cottages, frequently the disease spreads in a district from a solitary imported case, although the greatest care may have been taken to prevent its dissemination. However, I have noted that since the disinfection of all infected premises has been carried out personally by the Inspectors, the clustering of the cases has not been so frequent.

A systematic house to house inspection has been made in each of the three districts by the Sanitary Inspectors, and a register has been kept, giving a detailed

account of the sanitary condition of the premises at the time of inspection, in this way nearly the whole of the Borough has been covered. These inspections I consider of the greatest service in dealing with a community where we find nuisances of frequent recurrence: such as overcrowding, dilapidations, and other sanitary defects.

I am pleased to state that a considerable decrease has taken place in the mortality among children under one year of age. Last year out of every thousand children born, 199 died under one year of age; while this year out of every thousand born, only 160 died, being the lowest mortality recorded for some years. Much improvement could yet be made in this direction if mothers would exercise more care in the feeding, clothing, and general attention of their children.

The trade of the town has been good throughout the year, the most of the manufacturers being fully engaged and working full-time. The building trade especially has been most active, numerous houses in the town and suburbs have been built, which I think is an index to the Borough's prosperity—a growing community being invariably a wealthy and prosperous one.

VITAL STATISTICS.

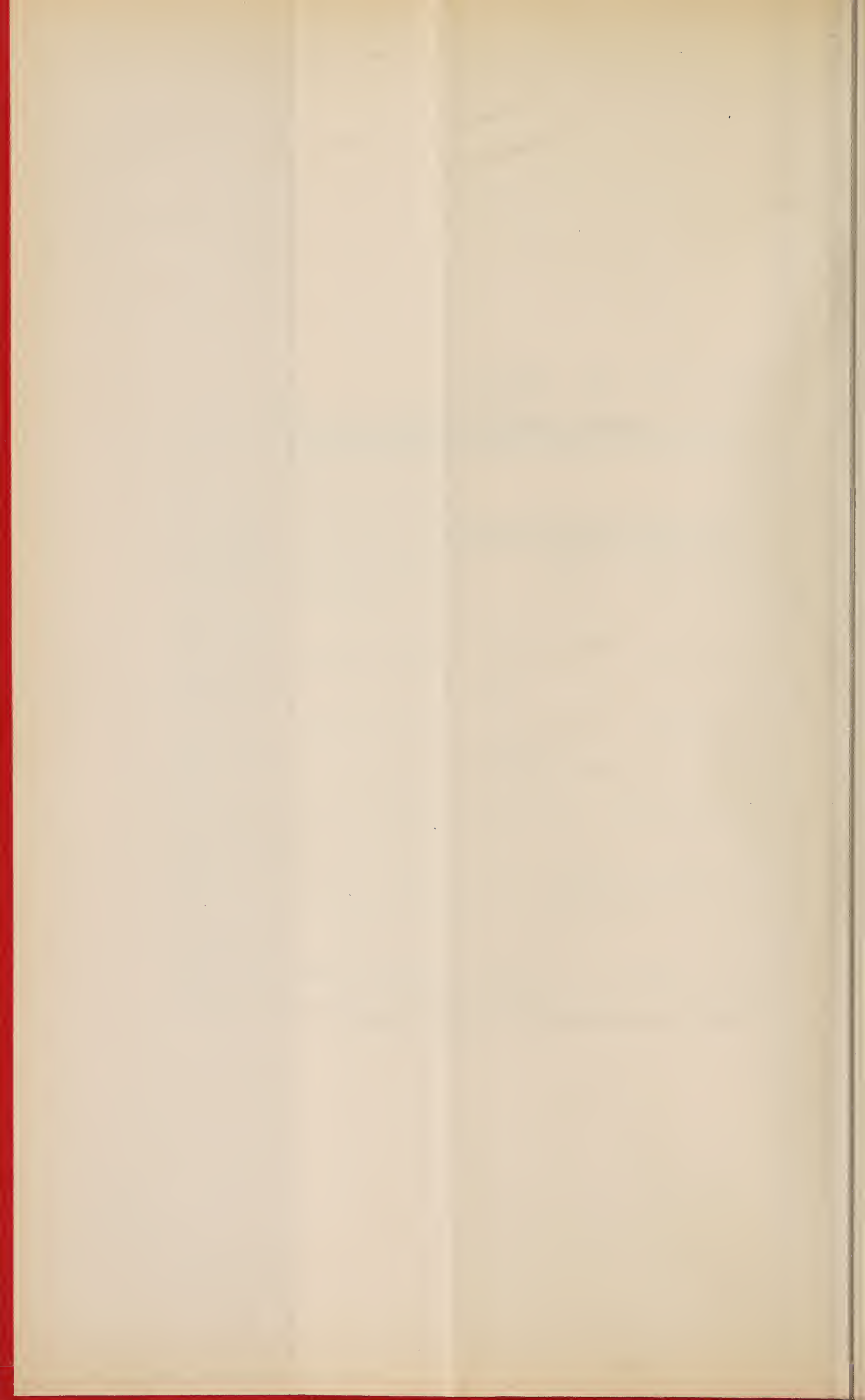
Population. At the last census the population was taken at 71,791. At the middle of this year I have calculated it to be 81,000, an addition of 9,209 since 1891.

The area of the Borough is 8,711 acres, giving a distribution of 9.29 persons per acre, and the number of inhabited houses is 16,730.

Births. There have been registered 2,921 births, 1,490 males and 1,431 females, giving a rate per thousand per annum of 36.06. This is an increase on the previous year, when the birth rate was 34.38, calculated from 2,471 births.

TABLE OF DEATHS,
During the Year 1898, in the Walsall Urban Sanitary District, classified according to Diseases, Ages, and Localities.

(a)				Mortality from all causes, at subjoined ages.							(i)	Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																					
				(b)	(c)	(d)	(e)	(f)	(g)	(h)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
				At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	Fevers.				Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All other Diseases.	Tot'l	
NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public institutions being shewn as separate localities.					Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.																							
WALSALL				1036	369	137	42	43	291	154	Under 5 5 upwds.	0 8 0 3	3 2	2 0	0 2 14	0 0	0 0	0 2	0 0	1 3	3 0	9 0	83 8 5 49	0 5	5 86 116	0 50	0 5	2 302 9 264	5 530				
BLOXWICH				214	64	39	9	15	57	30	Under 5 5 upwds.	0 2 0 0	1 0	1 0	0 1 2	0 0	0 0	0 1	0 0	0 6	9 9	14 2	0 1	5 13	22 28	0 3	0 3	0 2	42 56	103 111			
RUSHALL (part in Walsall) ..				99	33	12	6	2	30	16	Under 5 5 upwds.	0 0 0 0	1 1	0 0	0 1 1	0 0	0 0	0 0	0 0	0 0	0 2	5 1	0 4	8 11	0 5	0 2	27 29	45 54					
WORKHOUSE				107	3	3	0	4	48	49	Under 5 5 upwds.	0 0 0 0	0 0	0 0	0 0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	0 19	0 13	0 5	0 2	5 60	6 101				
DISTRICT HOSPITAL				47	1	12	8	5	18	3	Under 5 5 upwds.	0 0 0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	0 1	0 1	10 18	2 13	13 34				
TOTALS				1503	470	203	65	69	444	252	Under 5 5 upwds.	0 10 0 3	5 3	3 0	0 4 18	0 0	0 0	0 3	0 0	1 3	9 0	20 0	102 12	0 6	11 86	118 169	0 64	0 8	12 33	378 422	673 830		



The following table gives the number of births quarterly :—

Registration District.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.	
	Male	Female	Male	Female	Male	Female	Male	Female
Walsall ..	305	235	271	275	306	288	248	275
Bloxwich ..	59	56	67	75	61	62	62	60
Rushall (part in Walsall) ..	29	34	32	33	29	18	21	20
Totals ..	393	325	370	383	396	368	331	355

The total number of deaths from all causes is 1,503, Deaths. giving a death rate of 18·55 per thousand per annum. This is a decrease on the death rate for the preceding year, when 20·82 was recorded.

The following table gives the mortality from all causes at subjoined ages.

LOCALITY.	At all Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards
Walsall ..	1036	369	137	42	43	291	154
Bloxwich ..	214	64	39	9	15	57	30
Rushall (part in Walsall) ..	99	33	12	6	2	30	16
Workhouse ..	107	3	3		4	48	49
District Hospital ..	47	1	12	8	5	18	3
Totals ..	1503	470	203	65	69	444	252

The next table gives the quarterly and annual death rate since 1889 :—

Year.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.
1889	19·05	13·37	19·24	19·81	19·36
1890	24·50	14·83	17·11	19·77	19·05
1891	20·77	21·77	14·27	20·55	19·00
1892	28·60	18·30	14·11	21·5	20·83
1893	25·04	24·38	26·24	23·39	24·42
1894	20·53	14·45	14·98	15·84	16·44
1895	21·05	18·94	21·84	20·42	20·56
1896	20·61	16·73	18·60	18·61	18·48
1897	21·35	17·80	24·75	19·40	20·82
1898	19·85	16·24	19·75	18·37	18·55

Infantile
Mortality.

Although there has been a considerable improvement in the infantile mortality of this year, we yet hope that in the future our returns will show a still further decrease in the number of deaths among children under one year of age.

470 deaths of children under one year have taken place, giving a rate of 5·80 per thousand of the whole population, against 550 deaths during 1897, with a rate of 6·87 per thousand. Out of 2921 births recorded 2451 lived over the age of one year, and 2248 over the age of 5 years. This shews that out of the 2921 births registered, 673 children died under the age of 5 years, while last year 846 children died under the same age.

The next table shews the diseases prevalent among infants under one year of age, and the number of deaths attributed to those diseases.

Diarrhœa still heads the list with 74 deaths, that however, is a great decrease in the number of last year when 108 occurred. Convulsions is the next frequent cause of death, especially among the children of the very poor. Premature births, pneumonia, debility, enteritis, marasmus and bronchitis, are all responsible for a considerable number of deaths. It will be seen that on comparing this table with that of last year, the number of deaths from diarrhœa, bronchitis, convulsions, and measles has very much decreased, while the only increase in the table worthy of note is that of the number of premature births which have increased from 44 in 1897, to 58 in this year.

		1895.	1896.	1897.	1898.
Diarrhœa ..	..	101	42	108	74
Convulsions	..	69	66	88	71
Premature Births	..	55	74	44	58
Pneumonia	..	34	28	37	35
Marasmus	..	54	36	38	39
Debility ..	..	70	32	54	44
Enteritis ..	..	34	19	34	31
Bronchitis..	..	39	31	41	25
Meningitis	..	11	12	11	10
Whooping Cough	..	2	23	5	8

	1895.	1896.	1897.	1898.
Phthisis	22	7	8	6
Gastritis	—	—	—	5
Measles	7	6	21	3
Croup	5	1	1	—
Laryngitis	1	2	—	2
Thrush	3	1	2	1
Icterus	—	—	3	1
Diphtheria	—	—	3	2
Erysipelas	—	—	—	2
Peritonitis	—	—	—	3
Nephritis	—	—	—	1
Tabes Mesenterica ..	—	—	—	4

98 enquiries into the causes of deaths have been held Inquests. by the Coroner during 1898. 67 of the deaths were found to have been caused by violence (3 being suicides), and 29 were due to natural causes. 14 of the inquests were on children under one year of age, 6 of whom were suffocated whilst in bed with their parents.

ZYMOTIC MORTALITY.

Owing to the dying away of the epidemic of Measles and Scarlet Fever and the decrease in the number of deaths from Diarrhœa, we would naturally expect a fall in the zymotic death rate. Last year we had one of the highest zymotic death mortalities since the year 1893, when the zymotic death rate was 5·19, owing to the epidemic of Smallpox and Scarlet Fever. This year however it is slightly below the average for the last ten years, viz.: 2·41. The details are as follows:—

	Walsall.	Blox-wich.	Rushall (part in Walsall).	Work- house.	District Hospital.	Total.
Scarlatina	11	2	..	..	..	13
Diphtheria	5	1	2	..	..	8
Membraneous Croup	2	1	..	..	..	3
Typhoid Fever ..	16	3	2	1	..	22
Puerperal Fever ..	2	1	..	..	..	3
Erysipelas	4	..	..	..	..	4
Measles	3	6	..	..	..	9
Whooping Cough	9	9	2	..	..	20
Diarrhœa	91	16	6	1	..	114
Totals	143	39	12	2	..	196

The following tables shew the number of deaths from zymotic disease, and the zymotic death rate per thousand during the last ten years:—

	1889	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897	1898.
Scarlatina ..	23	23	12	21	17	1	2	23	29	13
Diphtheria ..	7	1	2	3	2	5	6	9	8	8
Membraneous Croup	6	9	3	2	2	1	7	7	1	3
Typhoid Fever ..	9	21	19	8	22	13	10	11	13	22
Puerperal Fever ..	3	4	4	2	2	3	1	2	4	3
Continued Fever ..	..	..	..	..	..	..	1	..	..	..
Erysipelas ..	5	7	9	2	3	4	2	1	..	4
Measles ..	18	12	61	9	88	4	28	27	66	9
Whooping Cough..	41	31	12	67	15	46	2	50	11	20
Diarrhoea ..	90	63	61	69	150	36	162	71	170	114
Small-pox ..	..	..	..	..	71	12	..	..	..	..
	202	171	183	183	382	125	221	201	302	196

	1889.	1890.	1891.	1892	1893.	1894.	1895.	1896.	1897.	1898.
Scarlatina ..	·33	·32	·17	·29	·23	·01	·02	·29	·36	·16
Diphtheria ..	·09	·01	·02	·04	·02	·06	·07	·11	·10	·09
Membraneous Croup	·08	·12	·04	·02	·02	·01	·09	·08	·01	·03
Typhoid Fever ..	·13	·30	·26	·11	·30	·17	·13	·14	·16	·27
Puerperal Fever ..	·04	·05	·05	·02	·02	·04	·01	·02	·05	·03
Continued Fever ..	..	..	..	..	..	..	·01	..	..	..
Erysipelas ..	·67	·10	·12	·02	·04	·05	·02	·01	..	·04
Measles ..	·26	·17	·85	·12	1·20	·05	·36	·34	·82	·11
Whooping Cough..	·58	·44	·17	·93	·20	·62	·02	·64	·15	·24
Diarrhoea ..	1·30	·90	·85	·95	2·19	·48	2·13	·91	2·12	1·40
Small-pox ..	..	..	..	..	·97	·16	..	..	..	..
Totals ..	3·51	2·41	2·53	2·50	5·19	1·65	2·86	2·54	3·77	2·37

INFECTIOUS DISEASES.

Notifications. There has been a great decrease in the number of notifications received during the year, 585 cases being notified, against 1036 during the year 1897.

This decrease is altogether due to the decrease in the number of Scarlet Fever cases notified, only 355 cases being recorded against 824 in 1897.

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS,
Coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Walsall Urban Sanitary District; classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities. (a)	Population at all Ages.		Registered Births. (d)	Aged under 5 or over 5. (e)	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.													Names of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospital.																
	Last Census. (b)	Estimated to middle of 1898. (c)			1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13				
Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.						Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.								
WALSALL (CENTRAL)	59,830	66,700	2,419	Under 5 5 upwards	0 0	16 23	1 0	2 1	0 0	1 14	0 0	0 0	0 1	0 0	1 19																			
CALDMORE, PALFREY, & PLECK.	0	0	0	Under 5 5 upwards	0 0	55 123	5 4	1 0	0 0	1 29	0 0	0 0	0 1	0 0	3 26																			
BLOXWICH, BIRCHILLS, AND RYECROFT	11,961	14,300	502	Under 5 5 upwards	0 0	49 87	3 6	3 0	0 0	6 46	0 0	0 0	0 6	0 0	4 36																			
WORKHOUSE	0	0	0	Under 5 5 upwards	0 0	0 2	0 1	0 0	0 0	0 3	0 0	0 0	0 0	0 0	0 6																			
DISTRICT HOSPITAL	0	0	0	Under 5 5 upwards	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0																			
TOTALS	71,791	81,000	2,921	Under 5 5 upwards	0 0	120 235	9 11	6 1	0 0	8 92	0 0	0 0	0 8	0 0	8 87																			

Notification of Infectious Disease is Compulsory in the District since March, 1891.



The following table shews the comparison with previous years since the Notification Act came into force :—

1891	1892	1893	1894	1895	1896	1897	1898
830	1079	1440	457	297	742	1036	585

The next table shews the distribution and number of cases notified :—

LOCALITY.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhoid Fever.	Puerperal Fever.	Erysipelas.
Walsall (Centre)—						
Under 5 {	16	1	2	1	..	1
5 and upwards {	23	..	1	14	1	19
Caldmore, Palfrey, and Pleck—						
Under 5 {	55	5	1	1	..	3
5 and upwards {	123	4	..	29	1	26
Bloxwich, Birchills, and Ryecroft						
Under 5 {	49	3	3	6	..	4
5 and upwards {	87	6	..	46	6	36
Workhouse—						
Under 5 .. .. {	..	..	..	..	..	..
5 and upwards {	2	1	..	3	..	6
Totals—						
Under 5 {	120	9	6	8	..	8
5 and upwards {	235	11	1	92	8	87

The fees paid to medical men for notification certificates came to £68 18s. 6d., or 17/1 per 1000 of the population. Fees paid to Medical Men.

Fumigation and disinfectants (supplied to the occupiers of infected houses) cost £21 11s. 8d., an average of 9 $\frac{3}{4}$ d. per house. This is an increase as compared with last year, and is no doubt due to the extra cost incurred in fumigating all houses after infectious disease.

Notifications
to Board
Schools.

The difficulty experienced in 1897 in regard to School Board Certificates has not been so noticeable this year, owing to the fact that each Inspector is now responsible for the notification of all infectious cases to the Head Teachers in his own district. A special point has been made that these notices should be sent at the earliest possible moment after receiving a notification from the medical man in attendance. Delay is however caused in many cases by the medical man who notifies neglecting to fill in on the provided form the name of the school attended by the children from the infected houses. The Inspectors would be saved a considerable amount of labour and trouble if some means were devised by which we could have a systematic intimation as to when the infected houses were ready for disinfection. At present I very rarely have a direct communication from the medical man in attendance stating that the premises may now be disinfected. I have noticed, however, that in cases where there are adults who have been compelled to remain at home from work on account of infectious disease being in the house, the notice intimating that the premises are ready for disinfection has invariably been sent at the earliest possible moment. Could this not be done in all cases?

While speaking of this matter it might be as well to mention again that some misapprehension seems to exist as to the duty of the Medical Officer of Health in cases of infectious disease. It is not considered advisable, and in only exceptional cases is it necessary, that he should personally visit such cases notified. It is the duty of the Medical Officer of Health to enquire into the origin and to investigate any fresh outbreaks of zymotic disease, but the Local Government Board's instructions can in no way be understood to mean that it is his duty to visit and personally supervise the isolation of persons or the disinfection of their homes.

We have still no Isolation Hospital, nor has a site Isolation yet been decided upon. This matter is now in the hands Hospital. of the General Purposes Committee.

The 1897 epidemic of Scarlet Fever was continued Scarlatina. into 1898. The cases were of a mild type, only 13 deaths taking place out of 355 cases notified, shewing a percentage of 3.66. 120 of the cases notified were of children under 5 years of age, and of these 10 died, 235 were of persons over 5 years of age, and of these only 3 died, thus shewing that this disease was more fatal in children under 5 years of age than in persons over that age. As in last year the cases were spread all over the town, the largest percentage again occurring in the Caldmore District, where the epidemic originally broke out. On referring to the table you can see at a glance the distribution of the cases in the various districts.

Owing to an epidemic of Typhoid Fever at Fishley Typhoid Lane, Bloxwich, where in a row of eleven houses we had Fever. 15 cases of this disease, the number of Typhoid Fever cases notified has been considerably increased. 100 cases have been notified in the Borough, 8 under and 92 over 5 years of age, against 71 cases reported in the preceding year. This increase is entirely due to the large number of cases notified from Bloxwich District, 52 cases being reported this year, against 17 during the year 1897. The comparatively high death rate from this disease is very much to be regretted, out of the 100 cases notified, 22 died, giving a rate per thousand of 2.20.

No increase in the number of cases has taken place in the other parts of the town, namely, in the Walsall Central and Caldmore Districts, where the cases were more of a sporadic nature, and not of an epidemic type, as shewn at Fishley, Bloxwich. The sewerage in the Bloxwich District I consider to be the principal factor in the producing of this epidemic. Near to the houses at Fishley in which this epidemic took place there is an open sewer conveying

nearly one-third of the Bloxwich sewage. This gives off an effluvia at times very offensive. The importance of this sewer as a disease-producing agent is brought more prominently into notice when we consider the fact that although the middens and ash-pits belonging to this property were emptied and thoroughly disinfected, and the houses themselves disinfected and limewashed effectually, the disease still continued. I think that this epidemic alone points strongly to the value of efficient sewerage, and to the immediate taking away of all excreta in covered channels to a place where it can be effectually dealt with.

Diphtheria.

Perhaps the most pleasant feature in this report is the continued decrease in the number of cases of diphtheria. In 1896 there were 42 cases, in 1897 36 cases, while this year only 20 cases have been notified. Of the 20 cases reported, 8 deaths took place, 5 of which were of children under 5 years of age, and 3 of persons over 5 years. This disease always shews a marked fatality among children, as out of 9 cases notified of children under 5 years, 5 deaths, or 55·5 per cent., died.

**Membranous
Croup.**

Seven cases of membranous croup were notified, 6 of children under 5 years, and 1 of a person over 5 years of age. Three deaths took place, all of children under 5 years.

Erysipelas.

Ninety-five cases of erysipelas have been notified, 8 of children under 5 years, and 87 of persons over 5 years of age. Almost the same number as was recorded last year. Unfortunately we have this year to record 4 deaths, 1 under 5 years of age, and 3 over 5 years. No deaths occurred last year.

**Puerperal
Fever.**

There have been notified 8 cases of puerperal fever, exactly the same number as in 1897. Three deaths took place, while in the preceding year we had 4.

The epidemic of measles which we had in 1897 was Measles. continued well into 1898. From the number of deaths taking place—9, all in children under 5 years of age—compared with 66 during the preceding year, we may safely judge that while the epidemic was dying away the cases must have been of a very mild type.

Whooping cough has been prevalent during the year, Whooping Cough. 20 deaths taking place—all of children under 5 years of age. This disease seems to have continued throughout the whole of the year, as deaths were registered more or less in each month. In the preceding year 11 deaths were recorded, occurring principally in the earlier months of the year.

Compared with 1897, the number of deaths from Diarrhœa. diarrhœa shews a marked decrease, 114 being registered this year, against 170 in the preceding year. 102 of the deaths were of children under 5 years, and 12 of persons over 5 years of age. We find, as usual, that nearly all the deaths took place during the months of August, September, and October, thus shewing that that season has always a great influence on the fatality from this zymotic. No doubt the injudicious feeding of children, and the general carelessness of those responsible for their nursing, have a great deal to do with this continued high death rate from diarrhœa. Especially is this apparent when we consider that 74 of the cases dying were of infants under one year of age—probably all of those bottle fed.

Influenza was responsible for 8 deaths, very probably Influenza. a small percentage if we could accurately reckon the exact number of cases. No doubt during the earlier part of the year, when this zymotic was so prevalent in the town, some thousands of persons were attacked, happily, however, the majority of the cases must have been of a very mild type. Although influenza was the primary cause of 8 deaths, as a rule the fatality was preceded by some complication, more especially some disease of the respiratory organs.

SANITARY WORK.

Sewage
Disposal.

An improvement has been made in the Sewering of Streets in the Bloxwich district:—Harrison Street, Old Lane, Harden Lane, Leamore, and Harden Lane, Blakenall, having been provided with new sewers. The property owners in those streets have drained their houses into the sewer, and although a distinct improvement has been made in the sanitary condition of that part of the Borough, Parker Street, Bloxwich, is still drained into dumb wells; but I believe that the sewerage of the whole of this street is provided for in a scheme now before the Council.

There is a little new to report in regard to the sewage disposal at the farm, the precipitation and filtration giving a satisfactory effluent. The water carriage system has steadily increased from year to year, the number of old privies existing being now comparatively small.

Ventilation
of Sewers.

The work of replacing the ventilation on a level with the street, by shafts running up to a considerable height against tall chimneys, has been carried on with undoubted advantage. Until we have a complete water carriage system, the sewers will run dry on the higher levels, and thus cause smells to be generated. It is there where these high ventilating shafts are of the utmost importance, as by this means the effluvia is carried high into the atmosphere and diluted.

Refuse
Disposal.

The emptying of ashpits and the disposal of refuse is managed by the Borough Surveyor's Department, and the efficient manner in which this is done, is worthy of all praise. I should like, however, to call your attention to the urgent need of destructors. I did hope that we would have had them long ere this, but perhaps in the near future we may have the purifying action of fire to assist us in the destruction of what might be considered one of our most potent disease producing media.

A house to house inspection has been made in each of the three districts by the Inspector in charge, and I consider this to be the only way when carried out in a systematic manner, by which any town can be effectually kept in a sanitary condition. The number of visits paid by the Inspectors to infectious cases somewhat curtails this work, but on an average each of them is able to visit and report upon between 400 and 500 houses in the month.

Abatement of Nuisances.

The recurring evil of overcrowding is perhaps as prevalent as ever. The small number of cases reported and dealt with I take to be no index to the number of houses that are positively overcrowded in the Borough. In Bloxwich District this evil is perhaps worse than in any other part of the town. I hope, however, that this nuisance will be more carefully looked after, and more strictly dealt with in the future.

Overcrowding

The slaughter-houses have had very careful inspection during the year, and the majority of butchers have done their utmost to prevent nuisances arising. There are 53 private slaughter-houses in the Borough, and I regret that several of those, especially some of the old registered ones, are really unsuited for the purpose for which they are used. There are also instances in which the poorer tradesmen, owing to their being underhanded, are unable after killing to have their houses cleansed and disinfected within a reasonable time.

Slaughter-houses.

I hope the time is not far distant when the question of a public slaughter-house will be seriously considered. Nothing affects the health of the community more than an unwholesome supply of meat, and if that be so nothing can be more beneficial to a community than that their meat foods should be certified to be fresh, wholesome, free from disease, and nutritious. To guarantee this a systematic inspection ought to be made of all meat killed in the

Borough, or offered for sale. With a public slaughter-house it would be an easy matter to certify all meat slaughtered in it, but in the case of imported meat this would be more difficult, unless the same thing were done when it was slaughtered, and a certificate sent with it to our Authority. All this becomes important when we consider that tuberculosis, trechina, and other diseases are frequently caused by the eating of diseased meat.

Factories and
Workshops.

The Inspectors spend one day in the week in visiting the workshops, and they give attention to their ventilation and sanitary requirements.

Smoke
Nuisances.

The smoke nuisance I consider to be one of the most serious grievances that we have, and although a great deal of time has been spent in making observations, and in keeping records of the time per hour that black smoke has been emitted from many stacks in the Borough, and numerous letters sent to the worst offenders, calling their attention to the nuisance caused by the smoke, and asking for abatement, I think I can venture to say that taken as a whole, little or no improvement has been made. Nor can improvement be made until the manufacturers themselves grasp the seriousness of the situation. There seems to be considerable misunderstanding as to the period of emission of black smoke on which successful magisterial proceedings can be taken. It has been ascertained that successful prosecutions have followed the evolution of black smoke for periods of: 3 minutes, Nottingham; 4 minutes, Birkenhead; 2 minutes in half-an-hour, Manchester; 4 minutes as a maximum, Liverpool; 5 minutes, Cardiff; 5 minutes, Halifax; 5 minutes, Leeds; $2\frac{1}{2}$ minutes in half-an-hour, Bolton; 6 minutes, Salford; 9 minutes, Blackburn; $4\frac{1}{2}$ minutes in half-an-hour, Oldham; 10 minutes, Preston and Leicester; 10 minutes or 3 per half-hour, Huddersfield; 18 minutes, Birmingham; 20 to 25 minutes, Gateshead. In the face of these facts it ought to be a very easy matter to institute a successful prosecution, as without the least difficulty several cases could be got every day. Undoubtedly

the worst offenders are the large ironworkers in the Pleck and Birchills districts. It may be reasonably assumed that ironfounders, puddlers, etc., cannot carry on their industry without smoke, but there is no reason why, if they must smoke, there should not be a limit to it; at the present time it seems to me there is one continuous smoke.

RAINFALL.

I am indebted to Mr. Best for his kindness in supplying me with the following table, shewing the rainfall for the last six years. The total rainfall during these years was:—

Month.	1893.	1894.	1895.	1896.	1897.	1898.
January	1.99	1.79	4.60	1.20	2.33	1.44
February	3.11	2.71	0.24	0.88	3.08	1.64
March	0.49	1.32	2.32	3.65	2.89	1.44
April	0.59	1.41	2.23	1.32	2.04	1.76
May	2.46	2.17	0.35	0.31	1.37	5.36
June	1.87	2.87	1.20	1.69	3.66	1.86
July	2.52	3.43	2.63	1.77	0.99	1.80
August	2.28	2.73	2.57	2.24	5.97	1.97
September	1.84	1.52	0.44	4.52	2.70	0.53
October	2.73	2.86	3.87	2.36	1.52	3.48
November	1.53	2.82	3.42	1.81	2.45	2.63
December	3.82	2.39	2.37	3.81	2.50	2.42
Totals	25.22	28.02	26.24	25.56	31.50	26.33

In conclusion I have to regard the year 1898 as quite as satisfactory from a health point of view as any of the preceding ten years in which I have had the honour to be your Medical Officer of Health. There are many difficulties with which we have still to contend, and many improvements that I should like to see carried into effect, but especially would I suggest that the provision of a new Isolation Hospital, an efficient Disinfector, and a Public Slaughter-house, be in the near future again on your agenda for discussion.

Conclusion.

I have to thank the Health Committee for their continued courtesy and kindness to myself and the Sanitary Inspectors, and also I have to thank the other Borough Officials for their very valuable assistance to us in the performance of our duties.

Nor can I allow this Report to close without referring to the lamented death of our Chief Inspector, Mr. Harries, who, for over twenty years, gave his best services to the welfare of the town.

Last, but not least, a word of praise is due to the Sanitary Inspectors, for the efficient and systematic manner in which their routine duties have been carried on, and I also desire to express my thanks to them for their assistance to me.

I have the honour to remain,

Gentlemen,

Your obedient servant,

JAMES SCOTT WILSON, M.D., D.P.H.,

Medical Officer of Health.



ANNUAL REPORT

OF THE

INSPECTOR OF NUISANCES

of the Borough of Walsall for the year 1898.



MR. CHAIRMAN AND GENTLEMEN,

I have the honour of presenting to you my first Annual Report of the work done in my department by and under your authority during the year 1898.

I am, however, somewhat handicapped in formulating my report owing to my appointment as Chief Inspector of Nuisances dating only from November 9th.

You will see from the subjoined tables that I have followed the lines laid down by my predecessor, the late Mr. G. W. Harries.

As will be seen from Table II., a large amount of work has been done generally, but more especially in structural alterations. 2,765 yards of new drainage has been laid in connection with houses, and also 216 old privies converted into water closets. These conversions have been effected to remedy dilapidations and to abate continued nuisances.

A very satisfactory alteration has been made in dealing with the disinfection of houses.

The Inspectors now personally fumigate and disinfect all infected premises after receiving notice that the patient is free from contagion.

I am,

Gentlemen,

Your obedient Servant,

ARTHUR T. HUBBLE,

Inspector of Nuisances.

TABLE I.

Notice of Ordinary Nuisances.

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.	
To remedy defective drainage, defective and dilapidated privies, water closets, ash-pits, yards, etc.	337	329	402	
To whitewash and purify houses, rooms, yards, etc.	87	56	55	
To remove offensive accumulations of refuse ..	49	24	27	
To remove animals so kept as to be a nuisance ..	21	21	35	
To cleanse privies and yards	41	39	38	
To repair dwelling houses	12	10	8	
To close dwelling houses unfit for human habitation .. .. .	..	1	..	
To vacate dwelling houses unfit for human habitation	7	3	..	
To remove stagnant water in cellar	3	1	2	
To provide drainage to houses, yards, etc. ..	1	..	6	
To reduce overcrowding in dwelling houses ..	2	3	7	
To provide drinking water.. .. .	7	6	10	
To provide ventilation for workshops, etc. ..	..	1	..	
To detach sink drain from sewer drain	7	3	2	
To repair manure pit	2	..	2	
To cleanse ditch .. .. .	..	4	9	
To repair spoutings.. .. .	2	..	1	
To repair sinks	2	2	8	
To repair urinals	6	1	1	
To cleanse or do away with cisterns and wells ..	3	3	1	
To provide ash-pits.. .. .	..	1	..	
To fill up cisterns .. .. .	..	1	..	
To abate smoke nuisances	4	3	1	
To repair cellars .. .. .	..	1	..	
To provide privies and water closets for dwelling houses	1	1	..	
To board up houses unfit for human habitation ..	2	2	5	
To SURVEYOR—				
Foul manholes	2	..	4	
Foul street gullies	5	8	1	
Insufficient privy accommodation for factories and workshops.. .. .	7	1	1	
Alleged dangerous buildings	8	1	3	
Insufficient water supply	8	1	1	
	626	527	630	1,783
To cleanse ash-pits .. .. .	..	..	..	7,965
				9,748

TABLE II.
Result of Notices.

Structures.	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
New Drains (Yards)	430	800	1535
New Privies	9	..	10
New Ashpits	3	1	8
Old Privies converted into Water Closets ..	43	95	78
New Urinals.. .. .	1	..	6
New Cesspits .. .. .	..	..	1
Drain Traps	52	81	183
New Ventilating Shafts	15	7	37
Ashpits Roofed	15	3	11
Privies removed .. .. .	..	..	2
Sink Drains detached from sewer	2	1	1
Sink Pipes	1	2	17
Inspection Chambers	1	..	11
Samples of Water and result of test.			
Water tested	14	12	11
Unfit .. .. .	..	4	2
Unsafe	10	8	9
Good	4	..	..
Wells closed.. .. .	6	14	9
Houses supplied with water	25	49	32
Nuisances removed	516	467	565
Full Ashpits cmptied	7,965.		

TABLE III.
To abate overcrowding in Houses.

	No. 1 District.	No. 2 District.	No. 3 District.
Reduced	1	1	4
Vacated	1	3	3

TABLE IV.
Houses Unfit for Habitation.

	No. 1 District.	No. 2 District.	No. 3 District.
Repaired	4	6	11
Closed .. .. .	..	3	10
Vacated	8	3	1
Demolished	3	1	4

The thirteen houses closed as unfit for human habitation are situated in Chapel Street, Pleck; Freers Yard, George Street; Woods Fold, New Street; and Short Acre.

Number of Nuisances remaining on the books for the year ending December 31st, 1898, 102.

145 complaints of nuisances have been received and investigated. 541 letters and memoranda have been received, and 905 have been sent out, exclusive of Reports.

House to house inspections have been made in each of the Districts :

No. 1 District	..	..	4571 houses.
No. 2 District	..	..	4679 "
No. 3 District	..	..	4905 "
Total	..		<u>14,155</u> "

TABLE V.—TRADES.

REPORT OF INSPECTOR OF CANAL BOATS.

(A. T. HUBBLE).

Number of Boats Inspected ..	..	..	..	101
Number conforming to Acts and Regulations ..	..	..	..	93
Number of Boats with one or more Infringements ..	..	..	..	8
NATURE OF INFRINGEMENTS.	Registration, Act 77, Section 1 ..	..	..	0
	Notification of change of Master, Regulation 4 ..	..	..	0
	Absence of Certificate, Act 77, Section 3 ..	..	..	3
	Certificate not identifying owner with boat, Act 77, Section 3 ..	..	..	0
	Marking, Act 77, Section 3; Act 84, Section 7. Reg. 7 ..	..	..	2
	Overcrowding, Regulation 8 ..	..	..	2
	Partition separating the sexes, Regulation 8bii ..	..	..	0
	Females over 12 improperly occupying, Regulation 8c ..	..	..	0
	Cleanliness, Regulation 11..	..	..	0
	Painting, Regulation 9 ..	..	..	1
	Ventilation, Regulation 3c..	..	..	0
	Dilapidation, Regulation 11 ..	..	..	0
	Removal of Bilge Water, Regulation 10 ..	..	..	0
	Without Pump, Regulation 3, Section H and Regulation 10 ..	..	..	2
	Refusal of Admittance to Inspector, Act 77, Section 5 ..	..	..	0
	No Proper Water Vessel, Regulation 3i ..	..	..	0
	Without Requisite Double Bulkheads, Regulation 3b ..	..	..	0
	Notification of Infectious Disease, Regulation 12 ..	..	..	0
Total Infringements met with ..	..	..	..	10
Total Infringements remedied ..	..	..	..	8
Number still corresponding about ..	..	..	..	2
Number of Legal Proceedings taken ..	..	..	..	0
Number of Women with Boats Inspected ..	..	..	..	62
Number of Children between 5 and 12 ..	..	..	..	45
Number of Children, 5 years and under ..	..	..	..	71

Dairies, Cowsheds, and Milkshops.

All the Cowsheds in the Borough are cleansed and limewashed four times during the year.

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
No. of milking cows in the Borough	197	40	130
No. of cowkeepers or milksellers registered during the year.. ..	8	6	10
No. of cowkeepers	13	6	26
No. of purveyors of milk	43	60	25
No. of purveyors of milk given up the trade during the year	9	2	2
No. of purveyors of milk now on the books ..	64	72	61
No. of visits during the year	247	250	286

Bakehouses.

All the Bakehouses are cleansed and limewashed twice during the year.

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
No. of bakehouses in the Borough	38	29	32
No. of bakehouses not in use	7	5	3
No. of bakehouses in use	31	24	29
No. of visits to bakehouses	211	211	234
Total number of visits in the three districts is 656			

Slaughter-houses.

During the year one new Slaughter-house has been licensed in the Pleck Road.

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
No. of Slaughter-houses registered	23	10	10
No. of Slaughter-houses licensed for one year ..	5	4	3
No. of Slaughter-houses licensed for no fixed period	0	1	1
No. of Slaughter-houses not in use	2	0	2
No. of Slaughter-houses now in use in the Borough	26	15	12
No. of Visits	1021	614	608

Fish Yards.

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
No. of Fish Yards in the Borough	6	3	3
No. of Visits.. ..	241	115	60

Factories and Workshops' Act.

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
No. of Visits.. .. .	211	189	213
No. of Factories and Workshops supplied with new Water Closets and Privies	2	3	1

TABLE VI.
FOOD AND DRUGS.

The whole of the samples taken and submitted for analysis under the Sale of Food and Drugs Acts, 1875 and 1879, were found to be genuine.

Article.	No. 1 Dis.	No. 2 Dis.	No. 3 Dis.	Total.
New milk	13	10	9	32
Separated milk .. .. .	..	1	..	1
Butter	2	7	4	13
White pepper	1	3	2	6
Lard	1	..	1	2
TOTAL	17	21	16	54

TABLE VII.
INFECTIOUS DISEASES.

Cases notified under the Infectious Diseases (Notification) Act, 1889, from January 1st, 1898, to December 31st, 1898.

No. 1 District.

Diphtheria.	Mem- braneous Croup.	Erysipelas.	Scarlatina or Scarlet Fever.	Typhoid or Enteric Fever.	Puerperal Fever.
1	3	20	39	15	1

No. 2 District.

9	1	29	178	30	1
---	---	----	-----	----	---

No. 3 District.

9	3	40	136	52	6
---	---	----	-----	----	---

The Workhouse.

1	0	6	2	3	0
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Total of Cases Notified .. 585.

TABLE VIII.

Magisterial proceedings respecting various cases.

No.	Nature of offence.	When heard.	Results.
1	For not abating a nuisance.	July 11.	An order made with costs.
2	For not abating a nuisance.	July 22.	An order made with costs.
3	For not abating a nuisance.	September 14.	An order made.

TABLE IX.

Unwholesome food destroyed.

Herrings 2½ barrels taken from market.

Number of Notices sent to Schools respecting Infectious Disease in houses from which children attend School, Jan. 1st, 1898, to Dec. 31st, 1898.

NAME OF SCHOOL.	No of Notices sent <i>re</i> Infected Houses.	No. of Notices sent houses free from infection.
Grammar	1	1
Butts Board	10	11
Wesley, Ablewell Street	6	7
Tantarra Street	2	2
Saint Matthew's	1	1
The Bridge	13	14
Wisemore Board	5	5
Technical	1	..
The Mount	3	2
Bath Street	2	2
Caldmore	11	10
Palfrey.. .. .	56	54
Hillary Street	24	24
Saint John's, Pleck	5	3
Wolverhampton Road	11	11
Whitehouse Street	10	10
St. Peter's, John Street	5	5
Croft Street	6	7
Saint Andrew's	3	3
Centenary, John Street	4	7
Leamore	10	10
Elmore Green	16	16
Blakenall	4	4
Catholic. Bloxwich	6	7
Saint Patrick's	2	4
National, Bloxwich	15	18
Little Bloxwich .. .. .	..	2
Rushall Board School	1	1

	No. 1 Dist.	No. 2 Dist.	No. 3 Dist.
No. of Houses visited in which Infectious Diseases have occurred	72	230	222
Notices to Day Schools of Infected Houses ..	23	122	88
Notices to Sunday Schools of Infected Houses ..	17	71	60
Notices to Day Schools of Houses free from Infection	21	119	101
Houses Disinfected personally by the Inspectors ..	28	81	82
Houses Disinfected under the supervision of the Inspectors	21	74	87

No. of persons supplied with Brushes .. 1093.

No. of persons supplied with Lime .. 932.

12 Cases of Infectious Disease have occurred at the Workhouse.

Streets and Places in the Borough where Infectious Diseases have been reported and visited by the Inspectors during the year 1898, alphabetically arranged in the respective districts of the whole Borough.

Walsall Central.

STREETS.	No. of cases of Erysipelas.	No. of cases of Scarlet Fever.	No. of cases of Diphtheria.	No. of cases of Typhoid Fever.	No. of cases of Puerperal Fever.	No. of cases of Continued Fever.	No. of cases of Membranous Croup
Ablewell Street		1		1			
Albert Street				1			
Aldridge Road		3					
Bank Street	2						
Birmingham Road		1					
Borneo Street	1						
Butts Road	1	5		1			
Cecil Street		2					
Charlotte Street		1					
Chuckery		1					
Day Street		1					
Duncalfe Street	2						
Freer Street							1
Hatherton Street		1					
High Street				1			
Holtshill Terrace	1						
Intown Row				1			
Lichfield Road		1					
Lichfield Street	1						
Lime Street	1	2					
Littleton Street	1						
Lower Rushall Street	1	1		1			
Mellish Road		1		1			
Mill Lane			1	1			
Pool Street	1			1			
Richmond Street				1			
Rowley Street	1						
Selborne Street				1			
Stafford Street (up to Blue Lane)		1		2			1
Sutton Road		1					
Tantarra Street		2					
Teddesley Street	1						
Union Street		2					
Upper Forster Street		1					
Upper Rushall Street	2				1		
Walhouse Street	2	3		1			

Streets and Places—(continued).

STREETS.				No. of cases of Erysipelas.	No. of cases of Scarlet Fever.	No. of cases of Diphtheria.	No. of cases of Typhoid Fever.	No. of cases of Puerperal Fever.	No. of cases of Continued Fever.	No. of cases of Membranous Croup
Walsingham Street	..	..	..		I		I			
Warwick Street	..	..	..		6					
Westbourne Street	..	..	..							I
Wisemore	..	..	..	2	I					

Caldmore, Palfrey, and Pleck.

Algernon Street	..	..	..		3					
Alexandra Street	..	..	..		9					
Arundel Street	..	..	..	I						
Augustus Street	..	..	..				I			
Barley Field Row	..	..	..		I					
Bath Street	..	..	..		4		I			
Bescot	..	..	..			I				
Bescot Street	..	..	..	I	5					
Brace Street	..	..	..		I					
Bradford Street	..	..	..		I					
Bridgeman Street	..	..	..		2					
Brook Street	..	..	..				I			
Caldmore	..	..	..		I					
Caldmore Road	..	..	..	I	I	I				
Chapel Street, Pleck	..	..	..		2	I				
Charles Street	..	..	..		I					
Church Street	..	..	..				3			
Checketts Street	..	..	..	I						
Cobden Street	..	..	..		3					
Corporation Street	..	..	..		I					
Countess Street	..	..	..	2	2		I			
Dale Street	..	..	..		I		I			
Darlaston Road	..	..	..	I	I		I			
Doveridge Fold	..	..	..		2					
Earle Street	..	..	..		I		I			
Emery Street	..	..	..	I						
Ford Street	..	..	..	I	2					
Forrester Street	..	..	..	2			I			
Frederick Street	..	..	..	I						
George Street	..	..	..	I						
Green Lane (up to Blue Lane)	..	..	..	2	6					
Hart Street	..	..	..		3					
Hillary Street	..	..	..	I			2			

Streets and Places—(continued).

STREETS.				No. of cases of Erysipelas.	No. of cases of Scarlet Fever.	No. of cases of Diphtheria.	No. of cases of Typhoid Fever.	No. of cases of Puerperal Fever.	No. of cases of Continued Fever.	No. of cases of Membranous Croup
Junction Street	..	..	..	I						
King Street ..	..	..	..		2	I				
Little London	..	..	..				I			
Long Street ..	..	..	..		3					
Lord Street ..	..	..	..		2					
Lysways Street	..	..	..		2					
Meeting Yard	..	..	..				I			
Margaret Street	..	..	..			I				
Marsh Street	..	..	..		I					
Milton Street	..	..	..		I I					
Mountrath Street	..	..	..				I			
Newhall Street	..	..	..	I						
New Street ..	..	..	..	I	I					
Oxford Street, Pleck	..	..	..		2		I			
Pleck Road ..	..	..	..	4	6		I			
Port Street ..	..	..	..		2		I			
Prince Street	..	..	..		9					
Queen Street	..	..	..		3					
Rosamond Street	..	..	..	I	2		I	I		
Regent Street, Pleck	..	..	..		I					
Rollingmill Street	..	..	..				I			
Rutter Street	..	..	..		8		I			
Sandwell Street	..	..	..	I	3	I	I			
South Street	..	..	..		3					
Spout Lane ..	..	..	..	I	9	I	I			
Stratford Street	..	..	..		2					
Sun Street ..	..	..	..		2					
Tasker Street	..	..	..		I					
Thorpe Road	..	..	..		4					
Victor Street	..	..	..	I	2	I				
Watery Lane	..	..	..		3					
Wednesbury Road	..	..	..	I	2		I			
Wellington Street	..	..	..		6					
Westbromwich Street	..	..	..	I	7	I				
Whitehall Road	..	..	..		I 7		3			
White Street	..	..	..		I					
Whitmore Street	..	..	..		4					
Windsor Street	..	..	..		4					
Wolverhampton Street	..	..	..				I			

Streets and Places—(continued).

Bloxwich, Leamore, Birchills, and Ryecroft.

STREETS.	No. of cases of Erysipelas.	No. of cases of Scarlet Fever.	No. of cases of Diphtheria.	No. of cases of Typhoid Fever.	No. of cases of Puerperal Fever.	No. of cases of Continued Fever.	No. of cases of Membranous Croup
Adam Street				2			
Alfred Street		2					
Alma Square				1			
Ann Street	1						
Barracks, The	1						
Bellfield Row		2					
Bell Lane	1	1		2	1		
Bentley Lane	1	5		8			
Birchills Street	1			1			
Blakenall		2					
Blakenall Heath	1	2	2				
Blakenall Lane		1					
Bloxwich Road	2	2			1		
Blue Lane	2	4			1		
Broad Lane		1					
Bullock's Fold		1					
Burrowes Street	1						
Cairns Street		1		1			
Cannon Street		2		1			1
Church Street, Bloxwich	1	3		1			
Clarendon Street		2					
Coalpool	1	1					1
Comwall Street		1					
Elmore Green Road	1	7					
Elmore Row		2					
Farringdon Street	3						
Field Street	1						
Fishley Lane				12			
Foster Street, Blakenall				1			
Francis Street			1	4			
Garden Street	2	2					
Green, The, Bloxwich		2		1			
Green Lane (from Blue Lane up-wards)	1	6		3			
Hall Street	1						
Harden Lane	1	1					
Hatherton Lane	1						
High Street, Bloxwich	2	6					
Hollyhedge Lane	1	3		1			

Streets and Places—(continued).

STREETS.	No. of cases of Erysipelas.	No. of cases of Scarlet Fever.	No. of cases of Diphtheria.	No. of cases of Typhoid Fever.	No. of cases of Puerperal Fever.	No. of cases of Continued Fever.	No. of cases of Membranous Group
Hospital Street		2		I			
James Street		I					
John Street		2			I		
Leamore Lane		7					I
Little Bloxwich				I			
Little Bloxwich Lane		I					
Long Acre					I		
Marlborough Street	I			I			
Marlow Street		2					
Newland Street		2		I			
New Street, Bloxwich		I					
Northcote Street	I						
North Street	I	2					
Old Lane		I					
Parker Street		I		I			
Park Road, Bloxwich		I					
Parkbrook			I				
Parkhill		5					
Pinfold		I					
Portland Street		4		3			
Providence Street		2					
Raleigh Street		4					
Reedswood Lane		2					
Reeves Street	I	7			I		
Regent Street			3				
Revival Street		I					
Rowland Street	I	I					
Ryecroft Street	I						
Sandbank		8		I			
Sellman's Hill, Little Bloxwich		I					
Short Acre	I	I					
Sneyd Lane	I						
Stafford St. (from Blue Lane upwards	I	2		I			
Station Street, Bloxwich		2		3			
The Flats		I					
Victoria Terrace, Leamore	I						
Wallington Heath	I						
Whitehouse Street		I					
Wolverhampton Road	I	4	I				
Wolverhampton Road, Bloxwich	I		I				
Woodall Street		3					
Workhouse	6	2	I	3			

HEALTH COMMITTEE

Of the Walsall Corporation.

Mr. COUNCILLOR JAMES WILLIAMS, Chairman.

Mr. COUNCILLOR C. C. WALKER, Vice-Chairman.

THE MAYOR.

Mr. ALDERMAN BAKER.	Mr. COUNCILLOR ROBERTS, J. H.
" " SANDERS.	" " THOMAS
" COUNCILLOR BROWNHILL.	" " THACKER
" " DREW.	" " WILLIAMS, JOHN

Mr. COUNCILLOR LITTLER.

Meet on the last Friday of every month, at 6 p.m.

Medical Officer of Health :

JAMES SCOTT WILSON, M.D., D.P.H., Camb.

Sanitary Inspector :

ARTHUR T. HUBBLE (Assoc. San. Inst.)

Assistant Inspectors :

FRANCIS SYKES and ERNEST F. MINER.

Clerk :

WALTER T. BLAKE.